

Appl. Ser. No. 10/737,240

Amend D - Resp to O/A 09/25/06

IN THE CLAIMS:

No claims were canceled.

Please amend Claims 21, 25, 26, 33, and 35.

No claims were added.

An amended version of the pending claims starts on page 03 in accordance with 37 CFR § 1.121(c)(3) as follows: The status of each Claim is indicated adjacent the Claim Number in accordance with the proper status identifiers: (Original), (Currently Amended), (Canceled), (Previously presented), (New), (Not Entered), (Withdrawn), and (Withdrawn-currently amended) in accordance with 37 CFR § 1.121. Any changes to the claims are shown by strikethrough (for deleted matter) and underlining (for added matter, excluding New Claims).

Thereafter, starting on a separate page, (Page 10), is the Remarks portion in accordance with 37 CFR § 1.111.

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Claims:

1-20 (Cancelled)

21. (Currently amended) A method for cleaning at least one of electronic assembly, stencil, and tooling related to manufacture of electronic assemblies, the steps comprising:

~~applying a fluid to the at least one of electronic assembly, stencil, and tooling related to manufacture of electronic assemblies~~

cleaning at least one of electronic assembly, stencil, and tooling related to manufacture of electronic assemblies by applying a fluid to said at least one of electronic assembly, stencil, and tooling related to manufacture of electronic assemblies via a fluid application apparatus,

~~applying vibrational energy by transferring the vibrational energy~~

applying a drying step utilizing vibrational energy in accordance with at least one of:

a) via a mechanical coupling a vibrational energy and said stencil by placing a material between a vibrational energy source and said stencil; and

b) via applying vibrational energy through the air, directed directing said vibrational energy towards the at least one of electronic assembly, stencil, and tooling related to manufacture of electronic assemblies,

wherein said vibrational energy is to aid in drying the at least one of electronic assemblies and tooling related to manufacture of electronic assemblies by applying vibrational energy to a section of said at least one of electronic assembly, stencil, and

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tooling related to manufacture of electronic assemblies via a vibrational energy application apparatus, wherein said vibrational energy application apparatus applies said vibrational energy after said fluid cleaning step, where said vibrational energy is applied for atomizing residual moisture droplets resident to the at least one of electronic assemblies and tooling related to manufacture of electronic assemblies.

22. (Previously presented) The method of claim 21, the method further comprising the step of:

applying vibrational energy to aid in cleaning of at least one of electronic assemblies and tooling related to manufacture of electronic assemblies.

23. (Previously presented) The method of claim 22, the method further comprising transferring the relational proximity of the vibrational energy source and the at least one of electronic assembly, stencil, and tooling related to manufacture of electronic assemblies to one another.

24. (Previously presented) The method of claim 21, the method further comprising transferring the relational proximity of the vibrational energy source and the at least one of electronic assembly, stencil, and tooling related to manufacture of electronic assemblies to one another.

25. (Currently amended) The method of claim 21, wherein the step of applying

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vibrational energy by transferring the vibrational energy for drying is accomplished by:

~~the method further comprising:~~

applying vibrational energy through the air, wherein said vibrational energy is directed towards the at least one of electronic assembly, stencil, and tooling related to manufacture of electronic assemblies.

~~transferring vibrational energy via mechanically coupling said vibrational energy source and said stencil to aid in the drying process.~~

26. (Currently amended) A method for cleaning a solder stencil, the method comprising the steps:

applying a fluid to a section of a solder stencil for cleaning the said solder stencil for a fluid cleaning process.

applying vibrational energy by at least one of mechanically coupling a vibrational energy source and the solder stencil and transferring the vibrational energy through the air directed towards the solder stencil,

moving a said vibrational energy source respective to said solder stencil, and ~~utilizing~~ applying said vibrational energy to apply a vibrational energy to said solder stencil, wherein said vibrational energy application apparatus applies said vibrational energy after the fluid cleaning process, where said vibrational energy is applied to assist in drying any residual fluid from said solder stencil by atomizing said residual fluid away from a top surface of said solder stencil.

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27. (Previously presented) The method of claim 26, the method further comprising the step:

transferring the relational proximity of the vibrational energy source and the solder stencil to one another.

28. (Previously presented) The method of claim 27, the method further comprising the step:

applying vibrational energy to the fluid to assist in a cleaning process.

29. (Previously presented) The method of claim 26, the method further comprising the step:

applying vibrational energy to the fluid to assist in a cleaning process.

30. (Previously presented) The method of claim 29, the method further comprising the steps commonly associated with automated solder screen printing, the commonly associated steps of solder screen printing comprising aligning electronic pads of a printed circuit board and apertures of the solder stencil, passing solder paste across apertures of a stencil, and separating the printed circuit board and the solder stencil.

31. (Previously presented) The method of claim 26, the method further comprising the steps commonly associated with automated solder screen printing, the commonly associated steps of solder screen printing comprising aligning electronic pads of a

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printed circuit board and apertures of the solder stencil, passing solder paste across apertures of a stencil, and separating the printed circuit board and the solder stencil.

32. (Previously presented) The method of claim 26, the method further comprising the step:

wiping the stencil with the wiping material.

33. (Currently amended) The method of claim 32, method further comprising the step:

applying a vacuum force to aid in cleaning the stencil, wherein said vacuum force applies a vacuum force from underneath and proximate the stencil.

34. (Previously presented) The method of claim 26, the method further comprising the step:

applying a vacuum force to aid in cleaning the stencil.

35. (Currently amended) A method for cleaning and drying a stencil, the method comprising the steps:

aligning at least one of: a printed circuit board to the stencil and an Integrated Circuit (IC) Wafer to the stencil, the stencil comprising at least one aperture, positioning the printed circuit board proximate the stencil;

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passing a printable medium across the at least one aperture of the stencil to apply a pattern of printable medium onto at least one of the printed circuit board and the IC wafer,

applying a fluid based cleaning process to at least one of the stencil and a wiping material; and

applying vibrational energy by at least one of:

through the air,

via mechanical contact to the stencil, and

to the wiping material,

wherein said vibrational energy is applied towards said solder stencil, wherein said vibrational energy application apparatus applies said vibrational energy after said fluid cleaning process, where said vibrational energy is applied to aid in drying the stencil wherein said vibrational energy for drying is applied in a manner to evaporate the material via the top of said stencil.

36. (Previously presented) The method of claim 35, the method further comprising the step:

applying the vibrational energy to aid in cleaning the stencil.

37. (Previously presented) The method of claim 35, the method further comprising the step:

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wiping the stencil with the wiping material.

38. (Currently amended) The method of claim 35, the method further comprising the step:

applying a vacuum force to aid in cleaning the stencil, wherein said vacuum force applies a vacuum force from underneath and proximate the stencil.

39. (Previously presented) The method of claim 36, the method further comprising the step:

solidifying said printable medium applied onto the IC wafer.

40. (Previously presented) The method of claim 36, the method further comprising the step:

applying vibrational energy to assist in releasing the printable medium from said stencil.